Gainward GTS 450 1GB Dual DVI
"Golden Sample™" Goes Like Hell

GPU	Core	Memory	Capacity	Type	Outputs
GTS 450	930 MHz	2000 MHz	1024 MB	GDDR5 / 128 bits	2 x DVI, VGA, HDMI

PRODUCT SPECIFICATIONS

- **Superior Hardware Design**
- **Gainward's** award winning High-Performance/ Wide-Bandwidth™ hardware design powered by NVIDIA's GeForce™ **GTS 450** GPU (**40**nm) integrating **1024MB/128bits** high-speed **GDDR5** memory which offers enhanced, leading-edge performance for the 3D enthusiasts.
- **930MHz** core clock, **2000MHz** (DDR 4000) memory clock.
- High performance 2-slot cooler.
- **Dual DVI** (resolution support up to 2560x1600), **VGA** and **HDMI** support.
- Full integrated support for **HDMI** 1.4a including xvYCC, Deep color and 7.1 digital surround sound.
- **Dual-link HDCP Capable:** Designed to meet the output protection management (HDCP) and security specifications of the Blu-ray Disc formats, allowing the playback of encrypted movie content on PCs when connected to HDCP-compliant displays.
- Supports two monitors simultaneously, enabled by the NVIDIA **nView™** Multi-Display Technology for office applications, 3D gaming and professional applications such as CAD, DTP, animation or video editing. NVIDIA **nView™** allows end-users to select any combination of multiple displays.

CHIPSET SPECIFICATIONS

- **NVIDIA GeForce™ GTS 450**
- **Microsoft DirectX 11 Support:** DirectX 11 GPU with Shader Model 5.0 support designed for ultra high performance in the new API's key graphics feature, GPU-accelerated tessellation.
- **NVIDIA PhysX™:** Full support for NVIDIA PhysX technology, enabling a totally new class of physical gaming interaction for a more dynamic and realistic experience with GeForce.
- **NVIDIA 3D Vision™ Ready:** GeForce GPU support for NVIDIA 3D Vision, bringing a fully immersive stereoscopic 3D experience to the PC. A combination of high-tech wireless glasses and advanced software, 3D Vision transforms hundreds of PC games into full stereoscopic 3D. In addition, you can watch 3D movies and 3D digital photographs in eye popping, crystal-clear quality.
- **NVIDIA CUDA™ Technology:** CUDA technology unlocks the power of the GPU's processor cores to accelerate the most demanding system tasks such as video transcoding, physics simulation, ray tracing and more, delivering incredible performance over traditional CPUs.
- **Microsoft Windows 7 Support:** Windows 7 is the next generation operating system that will mark a dramatic improvement in the way the OS takes advantage of the GPU to provide a more compelling user experience.

BUNDLED ACCESSORIES

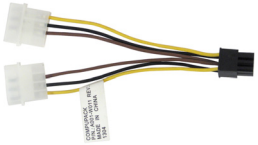
- Gainward QuickStart Manual

- Driver CD and Application S/W

Driver for Windows 7/Vista/XP

- Cables and Accessories

Complementary Power Cable



Gainward GTS 450 1GB Dual DVI

"Golden Sample™" Goes Like Hell

- Easy Plug-and-Play **AUTORUN** installation from CD-ROM.
- Includes Gainward's award winning **EXPERTool™ tuning utility** for customized performance enhancements and efficient desktop management.
- **NVIDIA SLI™ Technology:** Industry leading NVIDIA SLI technology offers amazing performance scaling by implementing AFR (Alternate Frame Rendering) for the world's premier gaming solution under Windows 7 with solid, state-of-the-art drivers.
- **NVIDIA GeForce Unified Driver Architecture (UDA):** Delivers a proven record of compatibility, reliability, and stability with the widest range of games and applications. NVIDIA GeForce drivers provide the best out-of-box experience for every users and deliver continuous performance and feature updates over the life of NVIDIA GeForce GPUs.
- **PCI Express 2.0 Support:** Designed for the new PCI Express 2.0 bus architecture, offering the highest data transfer speeds for the most bandwidth-hungry games and 3D applications, while maintaining backwards compatibility with existing PCI Express motherboards for the broadest support.

By taking advantage of the GPU for both graphics and computing, Windows 7 will not only make today's PCs more visual and more interactive but also ensure that they have the speed and responsiveness customers want.

- **DirectCompute Support:** Full support for DirectCompute, Microsoft's GPU computing API.
- **OpenCL Support:** Full support for OpenCL GPU computing API.
- **32x Anti-aliasing Technology:** Lightning fast, high-quality anti-aliasing at up to 32x sample rates obliterates jagged edges.
- **OpenGL 4.0 Optimizations and Support:** Ensures top-notch compatibility and performance for OpenGL applications.
- **PureVideo™ HD technology:** The combination of high-definition video decode acceleration and post-processing that delivers unprecedented picture clarity, smooth video, accurate color, and precise image scaling for movies and video.
- **Hardware Decode Acceleration:** Provides ultra-smooth playback of H.264, VC-1, WMV, DivX, MPEG-2 and MPEG-4 HD and SD movies without the need for a dual or quad-core CPU.

Note: Gainward's bundle items are subject to change. Please refer to your local Gainward dealer for more information, or the description in the regional product package

SYSTEM REQUIREMENTS

- Intel Core2Duo series, AMD Athlon 64 X2 series or above CPU
- Minimum of 2GB system memory
- Minimum 400W system power supply with one 6-pin PCI Express supplementary power connector
- DVD-ROM drive
- Requires a PCI Express 2.0 compliant motherboard
- Requires a dual-width x16 graphics slot
- Windows 7/Vista/XP

API SUPPORT

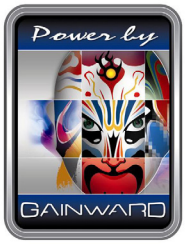
- DirectX 11 in hardware
- OpenGL 4.0 support

OS SUPPORT

- Windows 7/Vista/XP

BAR CODE

- Large Box: 426018336-1367



GAINWARD Gamer's Spirit!